

A NEW SPECIES OF *GLOANNA* NYE  
(LEPIDOPTERA: NOCTUIDAE)  
FROM WEST TEXAS

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*Abstract.*—*Gloanna hecate* is described. Imagines and male and female genitalia are figured.

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While collecting the Sierra Diablo mountains of western Texas in 1969, the senior author took a small series of a noctuid which later proved to be an undescribed species of *Gloanna* Nye. Seeking to improve on the series, the junior author visited the same locality 13 years later and succeeded in obtaining three additional specimens. The Sierra Diablo lie about 30 miles due south of the Guadalupe Mountains, rising to just over 6600 feet. The western slopes are gentle, but the eastern slopes drop precipitously nearly 3000 feet to the desert floor below. The upper elevations support an open forest of the pinyon pine, juniper, and several species of oak. The area remained virtually uncollected until investigations by the senior author began in the late 1960's, and it has yielded a number of previously unknown Lepidoptera.

*Gloanna hecate* Blanchard and Knudson, NEW SPECIES

Figs. 1-5

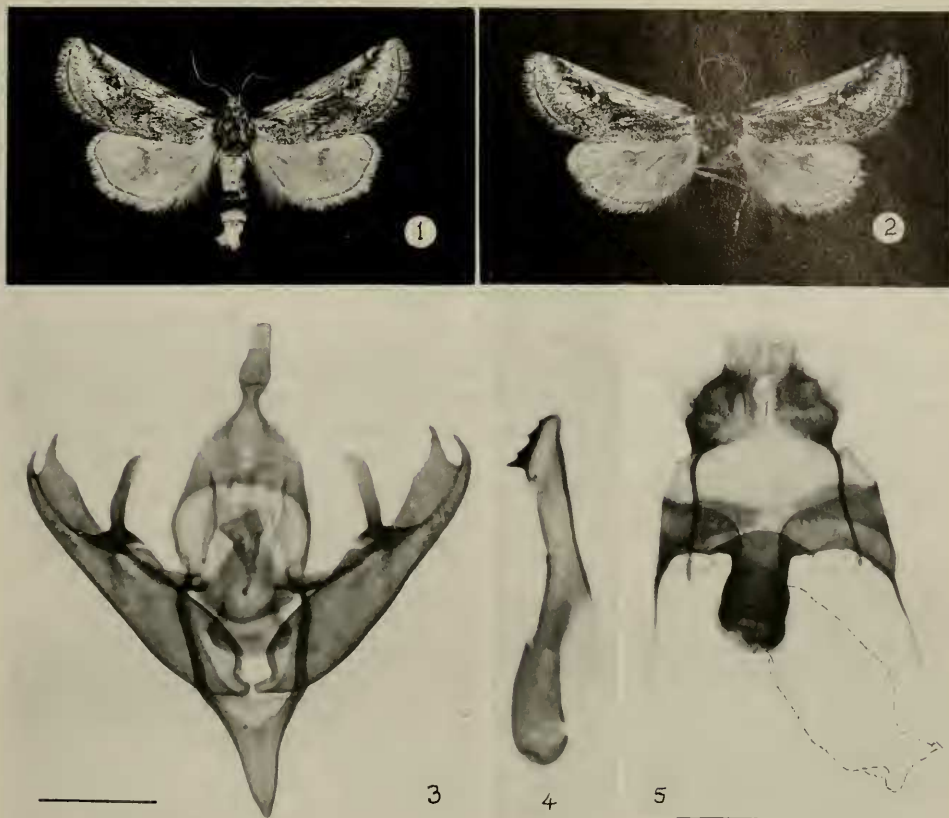
*Description.*—*Head:* Front and vertex whitish, heavily irrorated with black. Palpi mostly white, upturned, rising to less than  $\frac{1}{2}$  eye diameter. Tongue rudimentary. Antenna minutely bipectinate, pectinations heavily setose.

*Thorax:* Vestiture consists of white scales with black apices. Posterior tuft present. Black scale apices on mesonotum and posterior tuft show purplish blue iridescence at certain angles of light incidence.

*Abdomen:* Light ochreous gray.

*Forewing:* Ground color grayish, consisting of pure white scales, white scales with black apices, and dark gray scales with black apices. On costal margin extending to cell, ground color mostly white, with veins outlined in black. Basal  $\frac{1}{2}$  line black, outwardly angled from base. Antemedial line black, minutely dentate, outwardly convex. Subterminal line black, smooth, outwardly convex. Orbicular and claviform elongate, white, narrowly edged with black. Reniform white, narrowly edged, and pupilled with black. A black line extends obliquely from reniform to near apex, outwardly broadly edged with white. Terminal line black. Fringe consists of whitish scales with black apices.

*Hindwing:* Grayish white with dark gray, lunate, discal spot. Terminal line black. Fringe white.



Figs. 1-5. *Gloanna hecate*. 1, Holotype male, Sierra Diablo Wildlife Management Area, Culberson Co., Tex., 11-VI-82, E. Knudson, coll. 2, Paratype female, A. B. 2728, same locality, 7-VI-69, A. & M. E. Blanchard, coll. 3, Male genitalia of paratype, slide A. B. ECK 351, Sierra Diablo Wildlife Management Area, 11-VI-82, E. Knudson, coll. 4, Aedeagus of paratype, slide A. B. 1744, same locality, 8-VI-69, A. & M. E. Blanchard, coll. Fig. 5, Female genitalia of paratype, slide ECK 336, same locality, 11-VI-82, E. Knudson, coll. Lines in Figs. 3 and 5 represent 1 mm.

*Length of forewing*: Male:  $N = 3$ , 12.7–14.5 mm, average 13.7 mm; female:  $N = 6$ , 12.3–14.8 mm, average 13.7 mm.

*Male genitalia* (Figs. 3, 4): Fig. 3 is of genitalia with aedeagus removed. Fig. 4 shows aedeagus with sclerotized, spined plate on caudal extremity.

*Female genitalia* (Fig. 5): Ostial chamber heavily sclerotized. Bursa copulatrix membranous. Margins of bursa retouched in figure, as it did not take enough stain.

*Holotype*.—♂, Sierra Diablo Wildlife Management Area, Culberson Co., Texas, 11-VI-82, collected by E. Knudson and deposited in the National Museum of Natural History, Washington, D.C.

*Paratypes*.—Same data as holotype, 1 ♂, 1 ♀, collected by E. Knudson. Same locality, 5-VI-69, 3 ♀; 6-VI-69, 1 ♀ (in collection of J. G. Franclemont); 7-VI-69, 2 ♀; 8-VI-69, 1 ♂, all collected by A. & M. E. Blanchard.

*Remarks*.—This new species is most closely related to *Gloanna griseus* (Barnes and Lindsey), which was described from Arizona. *Gloanna hecate* differs from it

in the forewing pattern; *grisecens* is uniformly darker with more clearly defined maculation. *Gloanna hecate* differs, also, in having reduced pectinations on the antennae. The male genitalia of the two species are quite distinct; *grisescens* has a more elongate clasper, serrated apices of the valvae, and an aedeagus with a single cornutus, lacking the spined external plate. In several respects, *hecate* seems to represent an intermediate species between *Gloanna* and the closely related genus, *Acopa* Harvey. However, the sum of characters, especially the male genitalia favor placement in *Gloanna*.

#### ACKNOWLEDGMENTS

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